

# Focus, obviation, and word order in East Cree

Marie-Odile Junker

*Department of French and Cognitive Science Program, Carleton University, Ottawa, Ontario,  
Canada K1S 5B7*

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## Abstract

The goal of this paper is to show that the word order of a non-configurational language can be sensitive to the grammatical encoding of (non)topicality or obviation. The new data presented also provide evidence that the left periphery of an East Cree sentence plays a role for information packaging instructions. It is shown that an analysis that assumes that Focus is a functional projection fails to explain the East Cree data. Our analysis rather supports a treatment of Focus as an interpretation rule which is not encoded directly in the syntax.

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*Keywords:* East Cree; Algonquian; Focus; Topic; Obviation; Word order; Person hierarchy; Inverse

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## 1. Introduction

Languages tend to grammaticalize to a different extent certain pragmatic notions. Algonquian languages have a way to grammatically encode (non)topicality, a phenomenon traditionally called ‘obviation’. In this paper I present new data from my fieldwork on East James Bay Cree, an Algonquian language spoken in the Mistissini community of Quebec, Canada, showing that word order in East Cree is sensitive to obviation. I offer an analysis that supports a treatment of Focus as an interpretation rule that is not encoded directly in the syntax.

I will start with some background on the East Cree language and the theoretical approach taken here. I will then present the East Cree word order data and discuss the interpretation of preverbal NP positions, before turning to the analysis.

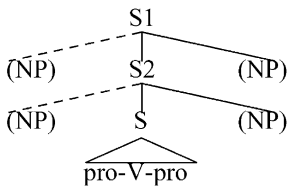
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*E-mail address:* [mojunker@ccs.carleton.ca](mailto:mojunker@ccs.carleton.ca) (M.-O. Junker).

## 2. Background

East Cree is a non-configurational (Hale, 1983), polysynthetic (Sapir, 1921), head-marking (Nichols, 1986) language.<sup>1</sup> Every verb constitutes a grammatical sentence by itself and contains pronominal affixes, identified by Jelinek (1984) as syntactic arguments. Full nominals are optional adjuncts. They bear number and gender agreement features which they share with the pronominal affixes on the verb [“pro” in (1)]. Neither the pronominal affixes, nor the full NPs bear overt Case features, except for locative. The representation in (1) illustrates that NPs can be adjoined on either side of the sentential node.<sup>2</sup> The non-dotted side is the preferred unmarked word order.<sup>3</sup>

(1) A Sentence in a Pronominal Argument Language (NP as adjunct analysis)



(Jelinek, 1984, and Baker, 1991, 1996)

All third person full nominals bear either proximate or obviative marking. Obviation is an obligatory morphosyntactic feature in Algonquian languages, which operates over medium-sized discourse units (Wolfart, 1973, 1996; Goddard, 1990; Russell, 1991; Long, 1999). In any discourse segment, only one third person

<sup>1</sup> For a full description see East Cree Interactive Reference Grammar (Junker et al., 2000–2003).

<sup>2</sup> List of abbreviations: **1**: first person; **2**: second person; **3**: third person animate proximate; **3'**: third person animate obviative; **0**: third person inanimate proximate; **0'**: third person inanimate obviative. **TA**: transitive animate (transitive verb with an animate object); **TI**: transitive inanimate (transitive verb with an inanimate object); **AI**: animate intransitive (intransitive verbs with an animate subject); **II**: inanimate intransitive (intransitive verbs with an inanimate subject); **DIR**: Direct; **>**: Direct or “outranks”; Example: **DIR(3 > 3')**: direct morpheme indicating a third animate proximate person acting on a third animate obviative one. **INV**: Inverse; **<**: Inverse; Example: **INV(3 < 3')**: inverse morpheme indicating a third animate obviative person acting on a third animate proximate one. **PROX**: proximate; **OBV**: obviative; **NP**: Noun Phrase; **pro**: pronominal affix; **V**: Verb; **SUBJ**: Subject; **OBJ**: Object; **S**: Sentence, without committing to it being CP or IP; **S1**, **S2**: levels of adjunction to S; **C**: Conjunct proverb. Morphemes separations in glosses are indicated with a hyphen-; when there is no clear separation, a dot . is used. To indicate that a form is unmarked, parentheses are used. For example “dog-(PROX)”, indicates the unmarked proximate form of the word “dog”. \* indicates an ungrammatical example; # indicates an infelicitous answer or discourse continuation.

<sup>3</sup> There is a debate in the Algonquianists’ literature as to whether IP or CP is the maximal projection of the verb-sentence. In an attempt to avoid such a debate which is outside the scope of this paper, I am using the old S notation. Verbs are inflected in three orders: independent, conjunct and imperative. The orders use different set of suffixes and differ in their syntactic function. While the independent and the imperative occur as whole sentences, the conjunct tend to occur in dependent clauses, in questions or independent clauses with special discourse properties.

argument is allowed to appear in the unmarked proximate form; all others must appear in the obviative. Proximate third person usually refers to the topic of discourse. Proximate shifts in a story allow for dramatic effects that are difficult to convey in English translation. The proximate is also the default form used when there is only one third-person in a context, for example when there is a first or second person and a third. Rather than saying that the unmarked proximate encodes a topic, Russell (1996) suggested that it might be more appropriate to view the marked obviative as marking non-topicality.

The morphology of Cree verbs also reflects which arguments are proximate or obviative, with a direction morpheme indicating the grammatical function of the arguments. The use of the direction morpheme can be best described using the notion of hierarchies. There is a person hierarchy in Cree, given in (2), where the proximate (topic) outranks the obviative (non-topic). NPs can be animate or inanimate, but the proximate outranks the obviative regardless of animacy.

(2) Person Hierarchy: PROXIMATE > OBVIATIVE

There is also a ranking of grammatical functions whereby the subject outranks the object. The direction morpheme thus appears on transitive verbs with animate object to indicate if the person hierarchy is aligned (DIRECT: >) or crossed (INVERSE: <) with the ranking of grammatical functions.<sup>4</sup>

<p>(3) <b>DIRECT</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">PROX</td> <td style="text-align: center;">OBV</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">SUBJ</td> <td style="text-align: center;">OBJ</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">Agent</td> <td style="text-align: center;">Patient</td> </tr> <tr> <td style="text-align: center;">Miyeyim-<b>e</b>-u</td> <td></td> </tr> <tr> <td style="text-align: center;">like-DIR(3 &gt; 3')-3</td> <td></td> </tr> </table>	PROX	OBV			SUBJ	OBJ			Agent	Patient	Miyeyim- <b>e</b> -u		like-DIR(3 > 3')-3		<p>(4) <b>INVERSE</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">PROX</td> <td style="text-align: center;">OBV</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">SUBJ</td> <td style="text-align: center;">OBJ</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">Agent</td> <td style="text-align: center;">Patient</td> </tr> <tr> <td style="text-align: center;">Miyeyim-<b>iku</b>-u</td> <td></td> </tr> <tr> <td style="text-align: center;">like-INV(3 &lt; 3')-3</td> <td></td> </tr> </table>	PROX	OBV			SUBJ	OBJ			Agent	Patient	Miyeyim- <b>iku</b> -u		like-INV(3 < 3')-3		<p>(5) <b>PASSIVE</b></p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">PROX</td> <td style="text-align: center;">(OBV)</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">SUBJ</td> <td style="text-align: center;">(OBJ)</td> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> <tr> <td style="text-align: center;">(Agent)</td> <td style="text-align: center;">Patient</td> </tr> <tr> <td style="text-align: center;">Miyeyim-<b>aakanu</b>-u</td> <td></td> </tr> <tr> <td style="text-align: center;">like-PASS-3</td> <td></td> </tr> </table>	PROX	(OBV)			SUBJ	(OBJ)			(Agent)	Patient	Miyeyim- <b>aakanu</b> -u		like-PASS-3	
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‘S/he<sub>PROX</sub> likes her/him<sub>OBV</sub>’ ‘S/he<sub>OBV</sub> likes her/him<sub>PROX</sub>’ ‘S/he<sub>PROX</sub> is liked.’

<sup>4</sup> The choice of direct and inverse morphology includes all persons in the following hierarchy: 2 > 1 > 3/0 > 3'/0'. When a second person acts on a first or third, only the direct can be used. When a first or third person acts on a second, only the inverse can be used. It is only with third persons that both inverse and direct are an option. A limited number of speakers extend the restrictions presented in this paper to all persons in the hierarchy. However the majority of others I have interviewed, especially monolingual speakers, do not. There seems to be considerable variation when first and second persons are involved, complicated by the fact that sentences with overt first and second person are odd for most speakers anyway.

The direct in (3) is used when a proximate subject acts on an obviative object. If the subject happens to be a character who is obviative in the story, then the inverse as in (4) is used. Another option would be to make a proximate shift, that is to turn this obviative character into a proximate one and use the direct form (3), but such a shift has special stylistic effects in the story, so the inverse in (4) is the more natural way to go. (5) is a passive without agent (Wolfart, 1991).

Aissen (1997) made the hypothesis that abstract systems of obviation play a fundamental role in organizing the syntax of a variety of languages. She suggests that many of the constraints on the realization of transitive propositions like in (3) and (4) are appropriately viewed as constraints on **hierarchy alignment**. She articulates her analysis within Optimality Theory (Prince and Smolensky, 1993) which allows her to formulate the factors that govern the choice of one candidate transitive construction over another (direct, inverse or passive) with constraints. The optimal candidate is the one which best satisfies the constraints. In Algonquian, the direct form of the verb is used when the subject outranks the object on the hierarchy, given in (2) above. When the object outranks the subject, the inverse is used. She suggests that this choice is governed by the alignment of two hierarchies, the Person Hierarchy and the Grammatical Function Hierarchy (she calls it the ‘Relational Hierarchy’). For transitive verbs, ‘direct align’ is a two place relation between hierarchies X,Y that requires that there be no two elements  $\alpha$ ,  $\beta$ , such that  $\alpha$  outranks  $\beta$  on X, but  $\beta$  outranks  $\alpha$  on Y. ‘Inverse align’ requires two elements  $\alpha$ ,  $\beta$ , such that  $\alpha$  outranks  $\beta$  on one hierarchy and that  $\beta$  outranks  $\alpha$  on the other. The choice of the direct versus the inverse will be made when the grammatical functions hierarchy (subject > primary object) is aligned with the Person Hierarchy, like 3 > 3’ in example (3). The inverse will be chosen when the Grammatical Function Hierarchy is not aligned with the Participant Hierarchy, like 3 < 3’ in (4) above.

In this paper I demonstrate that not only the choice of verb form, but also the word order of Full NPs is determined by such hierarchies, including a new one, the phrase-structure hierarchy in (1). I also show how preverbal and postverbal positions in East Cree contain information packaging instructions [Focus/Kontrast (Vallduví and Vilkkuna, 1998)] which are subordinate to obviation. I propose: (1) that East Cree word order restrictions result from **alignment constraints** between the person hierarchy in (2), the phrase structure in (1) and the linear order of the sentence, and 2) that Focus is best treated as an interpretation rule on a linear ordering constraint.

### 3. East Cree word order is determined by obviation

It is usually reported in the literature that in most dialects of Cree, all six possible combinations of subject NP, object NP and verb-sentence would be allowed

(Dahlstrom, 1991; Reinholtz and Wolfart, 1996)<sup>5</sup>. In Mistissini East Cree, however, the OSV order is ungrammatical. This is shown in (6) below with elicited data, checked and rechecked with several different speakers over time. The proximate NP is given in bold, as well as the preferred unmarked word order.

- |     |                                      |   |             |
|-----|--------------------------------------|---|-------------|
| (6) | ‘ <b>This child</b> likes this dog.’ | DIRECT  | (3 > 3’)    |
| a.  | SVO                                  | <b>[Uu awaash]</b> [miyeyimeu] [uyuuh atimh]                          | 3V3’        |
|     |                                      | <b>[Uu awaash]</b> [miyeyim-e-u] [uyuuh atim-h]                       |             |
|     |                                      | [this-(PROX) child-(PROX)] [like.TA-DIR(3 > 3’)-3] [this.OBV dog-OBV] |             |
|     |                                      | <b>this child</b> , he likes him, this dog                            |             |
| b.  | SOV                                  | <b>[Uu awaash]</b> [uyuuh atimh] [miyeyimeu]                          | 33’V        |
|     |                                      | <b>this child</b> , this dog, he likes him                            |             |
| c.  | VSO                                  | [Miyeyimeu] [uu awaash] [uyuuh atimh]                                 | V33’        |
|     |                                      | he likes him, <b>this child</b> , this dog                            |             |
| d.  | VOS                                  | <b>[Miyeyimeu] [uyuuh atimh] [uu awaash]</b>                          | <b>V3’3</b> |
|     |                                      | <b>he likes him, this dog, this child</b>                             |             |
| e.  | OVS                                  | [Uyuuh atimh] [miyeyimeu] <b>[uu awaash]</b>                          | 3’V3        |
|     |                                      | this dog, he likes him, <b>this child</b>                             |             |
| f.  | *OSV                                 | * [Uyuuh atimh] <b>[uu awaash]</b> [miyeyimeu]                        | *3’3V       |
|     |                                      | * this dog, <b>this child</b> , he likes him.                         |             |

The unmarked word order is (d), the VOS order. Variation in word order has to do with focus. For example (a), (b) and (e) are often translated by clefting: (a) and (b) ‘*It is this child who likes dogs*’; (e) ‘*It is dogs that this child likes*’. According to my consultants, (a) and (b) are synonymous, and so are (c) and (d), except that (d) is said to be ‘more natural’. Note that Cree seems quite different from Mayan languages, discussed by Aissen (1992), where the (b) and the (e) word order would be synonymous. Charlotte Reinholtz (p.c.) observed that for Swampy Cree, a related

<sup>5</sup> Unlike other linguists, Reinholtz and Wolfart (1996) give text examples for the 6 possible types of constituent order in Plains Cree using verbs in the direct. Not only do they note that ‘examples of OSV order with two full nouns are exceedingly rare’, but the example they give, unlike all other examples, has a verb in the conjunct order and combines a first person with a third person.

- (i) OSV (direct verb)  
 aaw, waaposo-miicimaapoy niya ee-wii-miiciyaan.  
 oh rabbit-soup(0) I(EMPH) going-to-eat-(s.t.)(VTI 1 CJ)  
 ‘Well, as for me, I am going to eat rabbit soup.’ (Reinholtz and Wolfart, 1996: 397)

It is noteworthy that, while they had access to a rather large body of texts (Plains Cree, unlike other Cree languages and dialects, has an impressive number of texts available, thanks to Wolfart’s lifelong devotion to collecting and editing stories), they could not find an example in the independent, with two 3rd persons, parallel to all the others they used. Chris Wolfart (p.c.) kindly looked for more in his database in 2000, and could not find any. My hypothesis is that direct (independent) \*OSV is as ungrammatical in Plains Cree as it is in East Cree. Chris Wolfart (p.c) notes that: ‘the sentence in question is a direct quotation, the response of a small boy being asked what he wants to eat in a restaurant. Both O and S are emphatic, sort-of-along the lines of: ‘Well, as for me, it is rabbit-soup I am going to eat.’ See Dryer (1997) for a discussion of the typology of such word orders.

Cree language (but not dialect, since East Cree and Swampy Cree are not mutually intelligible), it is also always the initial constituent that is interpreted as in Focus and that both (a) and (b) would translate by clefting the initial constituent. The sentence in (f), the OSV order, is unacceptable.

Interestingly, in the inverse, a different pattern of word order emerges. Notice that, in the inverse, it is the (b) sentence, the SOV order, which is disallowed. This is shown in (7) below. Again, the proximate is given in bold, as well as the preferred unmarked word order.

(7)	‘This child likes <b>this dog</b> .’	INVERSE	(3 < 3’)
a.	SVO [Uyuuh awaashah] [miyeyimikuu] [ <b>uu atim</b> ]		3’V3
	[Uyuuh awaasha-h] [miyeyim-iku-u] [ <b>uu atim</b> ]		
	[this.OBV child-OBV] [like.TA-INV(3 < 3’)-3] [this-(PROX) dog-(PROX)]		
	this child, he likes him, <b>this dog</b>		
b.	*SOV * [Uyuuh awaashah] [ <b>uu atim</b> ] [miyeyimikuu]		*3’3V
	* this child, <b>this dog</b> , he likes him		
c.	VSO [ <b>Miyeyimikuu</b> ] [yuuh awaashah] [ <b>uu atim</b> ]		V3’3
	<b>he likes him, this child, this dog</b>		
d.	VOS [Miyeyimikuu] [ <b>uu atim</b> ] [yuuh awaashah]		V33’
	he likes him, <b>this dog</b> , this child		
e.	OVS [ <b>Uu atim</b> ] [miyeyimikuu] [yuuh awaashah]		3V3’
	<b>this dog</b> , he likes him this child		
f.	OSV [ <b>Uu atim</b> ] [yuuh awaashah] [miyeyimikuu]		33’V
	<b>this dog</b> , this child, he likes him		

The unmarked preferred order this time is (c), the VSO order. (d) is synonymous to (c), but (c) is said to be ‘more natural’. Again, initial NPs in (e) and (f) can be translated by clefting ‘*It is this dog that this child likes*’ or (a) ‘*It is this child who likes this dog*’. This time, the sentence in (b), the SOV order, is not acceptable.

The pattern observed cannot be explained by resorting to grammatical functions. However, if we ‘translate’ this pattern of data, by replacing the grammatical functions by their corresponding ‘third persons’ in the sentence, we see that there is no longer a difference between the Direct and the Inverse: in both cases, it is the obviative–proximate–verb–sentence word order that is prohibited (\*3’3V). In both cases also, it is the verb–sentence–obviative–proximate word order that is preferred (V3’3), as shown in (8).

(8)	DIRECT (3 > 3’)	INVERSE (3 < 3’)
	SVO: 3V3’	SVO : 3’V3
	SOV: 33’V	*SOV: *3’3’V
	VSO: V33’	<b>VSO: V3’3</b>
	<b>VOS : V3’3</b>	VOS : V33’
	OVS : 3’V3	OVS : 3V3’
	*OSV: *3’3V	OSV: 33’V

The pattern of grammatical functions therefore reduces to a single pattern of proximate/obviative alternation, summarized in (9) below:

(9) East Cree word order as determined by obviation:

<u>One initial NP</u> : both OBVIATIVE and PROXIMATE allowed:	
3V3'	3'V3
<u>Verb initial</u> : both post-verbal order of NPs allowed, but PROXIMATE-final preferred: V33'                      V3'3	
<u>Two preverbal NPs</u> : PROXIMATE-initial required	
33'V	*3'3V

This data shows that word order preferences in East Cree are determined by the proximate/obviative alternation. Regardless of the direction on the verb, the preferred unmarked word order is with the proximate in final position. When two NPs are preverbal, they must be ordered in such a way that the proximate precedes the obviative.<sup>6</sup> The Person Hierarchy, repeated below, ranks a proximate higher than an obviative. So the ungrammatical \*3'3V we have observed seems to be the result of a violation of word order according to the person hierarchy for proximate (3) and obviative (3') animate NPs.

(10) PROX > OBV: 3 or 0 > 3' or 0'

If we look at inanimate NPs which also bear obviative marking in East Cree, the same pattern, given in (9), emerges.<sup>7</sup> This is shown by the sentences in (11): the preferred unmarked word order is the verb initial, proximate-final sentence (11d), and the forbidden word order is when the first of two preverbal NPs is obviative, as in (11f).

<sup>6</sup> A similar observation was made for Shawnee, another Algonquian language, by Boling (1981) (thanks to Benjamin Bruening who brought this to my attention). The reason that such word order generalizations and the role of obviation have not been much observed in the past is that the systematic data presented here can be very rarely found in texts. There is an observed universal tendency for speakers to avoid expressing more than one lexical argument or more than one piece of information in a clause (see Karkkainen, 1996 and references cited herein). Only elicited data could bring out this pattern. Like Davis (1999), I have observed that as long as the right discourse conditions have been established, sentences with more than one overt NP constituent are easy to elicit and are readily produced spontaneously. If a sufficient body of various texts were available, I expect the results could be duplicated with text examples.

<sup>7</sup> There is no inverse form for transitive verbs with inanimate objects (TI verbs), presumably due to an animacy hierarchy that prohibits inanimate subjects from taking animate objects. In the rare instances where this is possible, the inverse TA is used. This is another clue that hierarchy alignments play an important role in the syntax of Cree.

- (11) ‘**This child** has one book.’
- |         |  |       |
|---------|--|-------|
| a. SVO  | [Uu awaash] [ayaau] [peyakw masinaahiikaniyuu]       | 3V0'  |
|         | [Uu awaash] [ayaa-u] [peyakw masinahiikan-iyuu]      |       |
|         | [This-(PROX) child-(PROX)] [has.TI-3] [one book-OBV] |       |
|         | <b>this child</b> , she has it, one book             |       |
| b. SOV  | [Uu awaash] [peyakw masinaahiikaniyuu] [ayaau]       | 30'V  |
|         | <b>this child</b> , one book, she has it             |       |
| c. SO   | [Ayaau] [uu awaash] [peyakw masinaahiikaniyuu]       | V30'  |
|         | she has it, <b>this child</b> , one book             |       |
| d. VOS  | [Ayaau] [peyakw masinaahiikaniyuu] [uu awaash]       | V0'3  |
|         | <b>she has it, one book, this child</b>              |       |
| e. OVS  | [Peyakw masinaahiikaniyuu] [iyaau] [uu awaash]       | 0'V3  |
|         | one book, she has it, <b>this child</b>              |       |
| f. *OSV | *[Peyakw masinaahiikaniyuu] [uu awaash] [iyaau]      | *0'3V |
|         | * one book, <b>this child</b> , she has it           |       |

The ungrammaticality of sentences with a word order obviative-proximate–verb has something to do with the preverbal positions of the NPs. Let us have a closer look at the interpretation of the left periphery of the East Cree sentence.

#### 4. Interpretation of preverbal positions

The left periphery of the sentence in East Cree indicates some kind of Focus. The unmarked word order is always verb initial. When a sentence starts with a preverbal NP, this NP is usually interpreted as focussed. Recent cross-linguistic work on Focus by Vallduví and Vilkuna (1998) and McNally (1998) among others, suggests a distinction between what they call the Focus/Rheme and the Focus/Kontrast interpretations that often hides behind the single term *focus*. Focus/Rheme is about the new information in the sentence and is opposed to the Theme, the old information which is updated. Sentences can be truth-conditionally equivalent but can differ in their theme/rheme partition. This notion comes mainly from the work of the Prague-school of linguistics. Kontrast, on the other hand, comes from the formal semantics tradition and is defined as an operator-like element that covers interpretations found in the literature such as exhaustiveness foci, contrastive foci (Rooth, 1985, 1996), contrastive topics, and even interrogative wh-words (see Erteschik-Shir, 1998, 1999). I will adopt Vallduví and Vilkuna’s (1998) definition of Kontrast : if an expression *a* is kontrastive, a *membership set*  $M = \{ \dots, a, \dots \}$  is generated and becomes available to semantic computation as some sort of quantificational domain. A set of alternatives for the focussed constituent is generated as an additional denotation. On the other hand, Roberts (1998) argues that the Kontrast type of Focus is a subtype of the more general Rheme type of Foci (she calls it Information-Focus). What is clear from this debate is that not all types of Foci generate alternative sets and presuppositions. We will keep this debate in mind as we examine the Cree data.



Consider again the interpretation of sentences (6) (a), (b) and (e) repeated in (12) below. As mentioned above, Cree language consultants often translate the first constituent by clefting, as shown in the glosses:

- |      |   |        |          |
|------|---|--------|----------|
| (12) | ‘This child likes this dog.’  | DIRECT | (3 > 3') |
| a.   | [Uu awaash] [miyeyimeu] [uyuuh atimh]<br>‘It is this child who likes this dog.’ |        | 3V3'     |
| b.   | [Uu awaash] [uyuuh atimh] [miyeyimeu]<br>‘It is this child who likes this dog.’ |        | 33'V     |
| e.   | [Uyuuh atimh] [miyeyimeu] [uu awaash]<br>‘It is this dog that the child likes.’ |        | 3'V3     |

A typical continuation for such sentences is about the alternative set, such as for (a) and (b): ‘*not that child*’ and for (e): ‘*not the other dogs*’. Similar Kontrast interpretations are found for inverse sentences (7) repeated in (13) below:

- |      |  |         |          |
|------|--|---------|----------|
| (13) | ‘This child likes this dog.’   | INVERSE | (3 < 3') |
| a.   | [ <b>Uyuuh awaashah</b> ] [miyeyimikuu] [uu atim]<br>‘ <b>It is this child</b> who likes this dog.’  |         | 3'V3     |
| e.   | [ <b>Uu atim</b> ] [miyeyimikuu] [uyuuh awaashah]<br>‘ <b>It is this dog</b> that this child likes.’ |         | 3V3'     |
| f.   | [ <b>Uu atim</b> ] [uyuuh awaashah] [miyeyimikuu]<br>‘ <b>It is this dog</b> that this child likes.’ |         | 33'V     |

Note that it is always the first constituent that is contrasted. The appropriate answers to questions confirm that the first position can encode a Focus/Kontrast interpretation. To the clefted question (14a) ‘*What is it that this child likes?*’ only (14b) or synonymous clefted (14d) is a felicitous answer, not verb-initial (14c).

- (14a) QUESTION:  
 Aweyuu eukw e miyeyim-aat uu awaash?  
 Who.OBV it-is C like.TA-DIR(3 > 3')-3 (this-(PROX) child-(PROX))  
 ‘What (animate) is it that this child likes?’

- (14b,c,d) ANSWERS:  
 b. Atim-h miyiyim-e-u (uu awaash)  
 dog-OBV like.TA-DIR(3 > 3')-3 (this-(PROX) child-(PROX))  
 dog(s), s/he likes him/her/them, (this child)  
 ‘It is dog that this child likes.’

- # c. Miyeyim-e-u atim-h (uu awaash)  
 like.TA-DIR(3 > 3')-3 dog-OBV (this-(PROX) child-(PROX))  
 s/he likes him/her/them, dog(s, )(this child)  
 'This child likes dogs.'
- d. Atim-h eukw e miyeyim-aat (uu awaash)  
 dog-OBV it-is C like.TA-DIR(3 > 3') (this-(PROX) child-(PROX))  
 dog(s), it is that s/he likes, (this child)  
 It is dogs that this child likes.'

To a request for new information like regular question (15a) 'Who likes dogs?', a felicitous answer has the relevant NP in the first preverbal position, as in sentences (15b) and (d), but is not verb-initial like (15c). (16) shows that the same is true for a regular question on the object 'What does this child like?', and (17) for verbs that take inanimate objects (TI verbs).

- (15a) QUESTION:  
 Awen e miyeyim-aat atim-h? 'Who likes dogs?'  
 who-(PROX) C like.TA-DIR(3 > 3') dog-OBV

- (15b,c,d) ANSWERS:
- b. Awaash miyeyim-e-u (atim-h). 'A child likes dogs.'  
 child-(PROX) like.TA-DIR(3 > 3')-3 (dog-OBV)  
 a child, he likes them, (dogs)
- # c. Miyeyim-e-u (atim-h) awaash. 'A child likes dogs.'  
 like.TA-DIR(3 > 3')-3 (dog-OBV) child-(PROX)  
 he likes them, (dogs), a child
- d. Awaash (?atim-h) miyeyim-e-u. 'A child likes dogs.'  
 child-(PROX) (?dog-OBV) like.TA-DIR(3 > 3')-3  
 a child, (dogs), he likes them

- (16a) QUESTION:  
 Aweyuu e miyeyim-aat uu awaash? 'What does this child like?'  
 Who.OBV Conjunct like.TA-DIR(3 > 3') this-(PROX) child-(PROX)

- (16b,c) ANSWERS:
- b. Atim-h miyeyim-e-u (uu awaash). 'This child likes dogs.'  
 dog-OBV like.TA-DIR(3 > 3')-3 (this-(PROX) child-(PROX))  
 dogs, he likes them, (this child)
- # c. Miyeyim-e-u atimh (uu awaash). 'This child likes dogs.'  
 like.TA-DIR(3 > 3')-3 dog-OBV (this-(PROX) child-(PROX))  
 he likes them, dogs, (this child)

- (17a) QUESTION:  
 Awen peyakw masinahiikan-iyuu e ayaat? ‘Who has one book?’  
 who-(PROX) one book-OBV C have.TI.3 > 0’
- (17b) ANSWER:  
 Uu awaash peyakw masinahiikan-iyuu ayaa-u ‘This child has one book.’  
 this-(PROX) child-(PROX) one book-OBV have.TI-3  
 this child, one book, he has it

With a non-clefted question, as in the last three sets of examples (15, 16 and 17), it is not clear if the first position involves a Focus/Kontrast or just a Focus/Rheme interpretation. McNally’s (1998) cross-linguistic survey makes the prediction that Focus/Rheme-type constituents should not be encoded in any particular way. Another possible answer to question (17a), given by one consultant, is (17c), where the new information, ‘this child’, is in postverbal position, but the first constituent, although old information, is clearly a Kontrast, as shown by the suggested translation with operator-type adverbial ‘only’:

- (17c) ANSWER  
 Peyakw masinahiikan-iyuu ayaa-u uu awaash ‘This child has **only** one book.’  
 one book-OBV have.TI3 this-(PROX) child-(PROX)  
 one book, he has it, this child

This is a counter-example to Roberts’ (1998) claim that all Kontrast type of Foci are a subtype of the more general Rheme type of Focus (which she calls Information-Focus). For a language like East Cree, it seems necessary to distinguish between Focus/Kontrast and Focus/Rheme. The first position in East Cree encodes the Kontrast type of Focus, while the Rheme type can be anywhere, as McNally (1998) predicted.

Recall that a verb-initial sentence was not an appropriate answer to (15a) nor to (16a). So what are verb-initial sentences for? They represent the unmarked word-order, all-Rheme sentences. They are natural answers to Yes/No questions, as shown in (18):

- (18a) QUESTION  
 Atim-h miyeyim-e-u aa? ‘Does s/he like dogs?’  
 Dog-OBV like.TA-DIR(3 > 3’)-3 ?
- (18b) ANSWER  
 (Ehe,) Miyeyim-e-u atim-h. ‘(Yes,) S/he likes dogs.’  
 (yes,) like.TA-DIR(3 > 3’)-3 dog-OBV  
 (yes,) s/he likes him/her dog (animate)

In this section we looked at the interpretation of NPs in preverbal positions. With evidence gathered from questions data, we saw that there is a tendency to interpret the first initial NP as focussed, as a Focus/Kontrast type of Focus.

In order to correctly account for the data, it is crucial to determine the interpretation of sentences with two preverbal NPs. It is especially important to find out if it is the first or the second NP that is focussed.<sup>8</sup>

Correction data provides us with an interesting clue. When presented with ungrammatical \*OBV PROX V (3'3V), speakers always correct them as OBV V PROX (3'V3), that is a sentence with focus on the obviative constituent, as if the proximate was being misplaced. Such sentences are never corrected as PROX V OBV (3V3'), with focus on the proximate. On the other hand, PROX OBV V (33'V) and PROX V OBV (3V3') are interchangeable and seem synonymous. My conclusion is given in (19):

(19) **Focus/Kontrast is encoded in East Cree as the leftmost preverbal NP position.**

Word order data from Section 3, showed us that when two NPs are preverbal, the proximate one must precede the obviative one. We now need to explain why.

## 5. Analysis of East Cree word order

My observations so far are summarized below.

<u>One initial NP</u> : both OBVIATIVE and PROXIMATE allowed:	
3V3'	3'V3
<u>Verb initial</u> : both post-verbal order of NPs allowed, but PROXIMATE final preferred:	
V33'	V3'3
<u>Two preverbal NPs</u> : PROXIMATE initial required:	
33'V	*3'3V
<u>Focus/Kontrast</u> is encoded as the leftmost preverbal NP position.	

<sup>8</sup> An interesting question is whether both NPs could be focussed. The correction data seems to indicate that only one NP can be focussed, the first one, but data with *mikw* 'only' raises the question of double focus. First, *mikw* must appear in preverbal position. It cannot modify an NP in postverbal position. This again is consistent with our conclusion that the preverbal position encodes a Focus/Kontrast, operator-like type of interpretation. The word order possibilities with *mikw* 'only' are as follows:

- |     |   |       |
|-----|---|-------|
| (i) | a. [Mik uu awaash] ayaau [peyakw masinaahikaniyuu]    | 3V3'  |
|     | b. [Mik peyakw masinaahikaniyuu] ayaau [uu awaash]    | 3'V3  |
|     | c. Wii mikw ayaau peyakw masinaahikaniyuu             | V33'  |
|     | c'. Mikw wii ayaau peyakw masinaahikaniyuu            | V33'  |
|     | d. [Mik uu awaash] [peyakw masinaahikaniyuu] ayaau    | 33'V  |
|     | d'. [Uu awaash] [mikw peyakw masinaahikaniyuu] ayaau  | 33'V  |
|     | f. *[Mikw peyakw masinaahikaniyuu] [uu awaash] ayaau  | *3'3V |
|     | f'. *[Peyakw masinaahikaniyuu] [mikw uu awaash] ayaau | *3'3V |
- (→ f is often corrected as b)

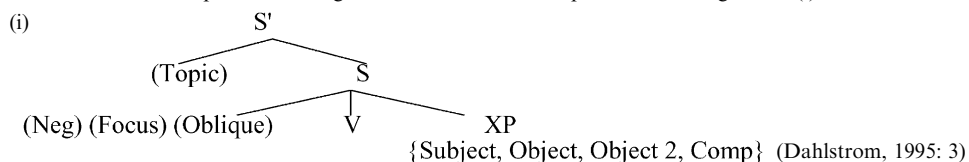
First notice that the prohibition against 3'3V word order is confirmed (f, f') and that again (f) is corrected as (b). I do not have enough data to discuss here the various interpretations of these sentences, suffice to notice examples d and d', with 33'V word order. Here *mikw* can modify either NP, suggesting the possibility of another operator-induced focus on the second preverbal NP. I leave this matter open for further research.

Recast in semantic terms, the prohibition to have an obviative in initial position before a proximate is equivalent to saying: ‘Do not have a non-topic (3′) precede a topic (3) preverbally’. Or, taking the Focus/Kontrast interpretation into account: ‘do not focus (or contrast) a non-topic if immediately followed by a topic’. However, such a formulation does not follow from any independent facts or knowledge we have about topics and non-topics, as far as I am aware. Nor does it have anything to say about the preferred post-verbal order with proximate final. So let’s look at some possible syntactic explanations.

### 5.1. *A movement to a Focus phrase? Problems with the licensing of NPs*

An appealing analysis in the Chomskyan current syntactic framework (Chomsky, 1995), would be in terms of discourse functional projections encoding notions like Topic and Focus.<sup>9</sup> Russell and Reinholtz (1996) and Reinholtz (1999) proposed for

<sup>9</sup> Another proposal for a hierarchical discourse structure in a non-configurational language that I am aware of is Aissen (1992) for Mayan. Dahlstrom (1995) also proposed a discourse structure, but she uses a flat structure with a specific ordering of constituents. Her template for Fox is given in (i).



For Dahlstrom, the Topic is what the sentence is about. It consists of emphatic pronouns, and it need not correspond to a gap in the sentence. If a negative element is present, it will always follow it. Focus is more restricted in that, by her definition, a focussed element must fill a gap in the following verb sentence. Dahlstrom’s observations about Fox postverbal elements fit the East Cree data: ‘There is some indication that the rightmost position in the sentence is associated with a special discourse function. The final NP often repeats the topic of the passage, bracketing or closing off the paragraph about a certain topic’ (Dahlstrom, 1995: 15). Interestingly, the two examples she gives are both proximate final, the first one in the direct and the second one in the inverse. The preference for proximate final corresponds to what we saw was the preferred unmarked word order in East Cree.

(ii) Fox proximate-final examples (from Dahlstrom, 1995:15)

a. DIRECT: VOS = V OBV PROX (her example # (33))

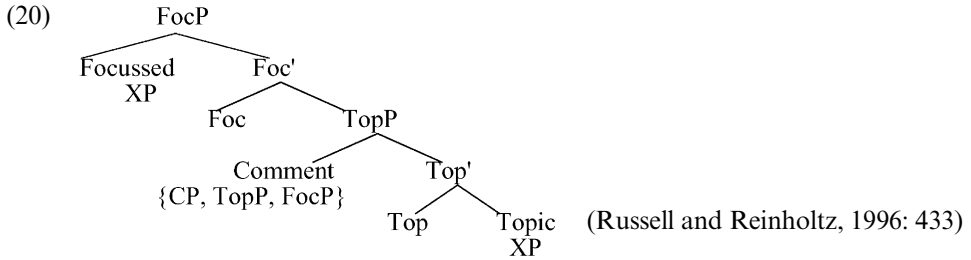
(33) a.kwi wi.to.hkklawa.cini [comp i.tepi wi.h = a.nici] [OBJ owi.wani] [subj i.na neniwa]  
not allow 3-3′/neg there fut + go.[thither] 3′/aor his.wife.obv. that man  
‘That man does not allow his wife to go there’

b. INVERSE: VSO = V OBV PROX

(34) [OBLkehckami.ki] e.h = tasi-komisahekoci [OBJ mesi name.wani] [SUBJ keki.wa-wa]  
ocean.loc [there] -swallow 3-3′/aor big.fish.obv your.pl.mother.  
‘The whale swallowed your mother in the ocean’

Her description of the meaning of the NP in the final position is consistent with the meaning generally attributed to proximate NPs: ‘what the conversation is about’. So the meaning may have more to do with the value of the proximate than the value of the position. It would be interesting to know if there is more evidence for the proximate-final preference in other Algonquian languages (see Rhodes, 1994). I leave this open for further research.

Swampy Cree the rightwards-branching hierarchical structure given in (20), hosting the preverbal NP in a Focus functional projection. Under such an analysis, Focus constitutes a particular head or node in the syntactic structure.



However, the main problem with such a hierarchical structure is that it rules out word orders with postverbal NPs, by violating the licensing condition on NPs proposed by Baker (1996) for such languages. Any postverbal NP in this structure does not command the pronominal argument in the verbal complex. Even if we gave up the licensing condition on NPs, there still would be no explanation for the word order restrictions we observed. We would still need an ad-hoc condition to constrain an obviative NP to only move to the (Spec of) the Focus Projection if no proximate NP has moved into the Spec of the other (Topic or Focus) Phrase (?). My conclusion is that Focus is not a feature permanently attached to a particular head or a node in the syntactic structure. Before we select an alternative analysis, let us verify if it is desirable to keep the licensing condition on NPs for East Cree.

### 5.2. Baker's licensing condition on NPs

Baker's licensing condition on NPs was originally designed for polysynthetic, dependent-marking languages like Mohawk. East Cree, while polysynthetic, differs in that it belongs to the class of head-marking languages (Nichols, 1986).

According to Baker's condition, any NP has to be licensed by a pronominal element or morpheme on the verbal complex in such a way that the NP forms a chain with the gap element. The conditions on chain formation include c-command, non-distinct morphosyntactic features and subjacency. This is certainly true in East Cree, where verbs can appear alone, without NPs, like in (21a), but where NPs cannot appear with a verb that does not match their features. (21b) is ruled out because the verb takes an animate object and the candidate NP *tehtapun* 'chair' is inanimate. The morphosyntactic features of the NP and the verb do not match. (21c) gives the correct construction, where the features of the object NP (inanimate, obviative) match the ones of the verbal complex.

- (21) a. Miyeyim-e-u  
 like.TA-DIR(3 > 3')-3  
 'S/he likes her/him.'

- b. \*Miyeyim-e-u uyuuh tehtapuun-iyuu  
like.TA-DIR(3 > 3')-3 this.OBV chair-0'  
'S/he likes this chair.'
- c. Miyeyiht-am uyuuh tehtapun-iyuu  
like.TI-3 > 0' this.OBV chair-0'  
'S/he likes this chair.'

(22), equivalent to Baker's Mohawk example [his (5b) p. 98], shows that a null pronoun is necessary to license a bare NP.<sup>10</sup>

- (22) \*Waachii-h miyuusu-u-ch mistiku-ch  
Mountains, be.pretty. AI-3-PL tree-PL  
'As for the mountain-PL, the trees are pretty.'

(23) and (24) present the East Cree equivalents to Baker's Mohawk examples (his (22a) and roughly (21a) p. 104) showing that c-command is required for licensing an NP and that island effects can be observed. (23) shows that the NP cannot be licensed by a pronoun inside a relative clause unless it itself is in that relative clause. (24) shows that an NP adjoined to a matrix clause is ungrammatical if the only pronoun for licensing it is inside an adjunct modifier clause.

- (23) a. Chi-chii nipahaau an atim [kaa kachemutit [aniyuu maschisin-iyuu]]  
You-PAST kill.TA.DIR.2 > 3 this dog [C steal.TI.3 > 0' [that.OBV  
shoe-OBV]]  
you killed him, that dog, who stole it, that shoe  
'You killed the dog who stole this shoe.'
- b. \*[Aniyuu maschisin-iyuu] chi-chii nipahaau an atim [kaa kachemutit]  
[That.OBV shoe-OBV] you-PAST kill.TA.DIR.2 > 3 that dog [C  
steal.TI.3]  
that shoe, you killed him, that dog who stole it
- (24) a. Ni-chii maatun [e-chii nipit Susan]  
I-PAST cry.AI.1 [C-PAST die.AI.3 Susan]  
I cried, she died, Susan

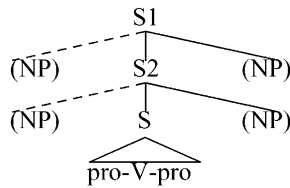
<sup>10</sup> (22b) and (22c) show that the example (22a) is acceptable with locative marking on the NP.

- (22) a. \*Waachii-h miyuusu-u-ch mistiku-ch  
Mountain-PL, be.pretty. AI-3-PL tree-PL  
'As for the mountains, the trees are pretty.'
- b. Waachii-hch miyuusu-u-ch mistikuch  
Mountain-LOC, be.pretty. AI-3-PL tree-PL  
'On the mountain the trees are pretty.'
- c. Miyuusu-u-ch mistiku-ch waachii-hch  
Be.pretty. AI-3-PL tree-PL mountain-LOC  
'The trees are pretty on the mountain.'

- 'I cried because she Susan died.'
- b. \*[Susan] ni-chii maatun [e-chii nipit]  
 Susan I-PAST cry.AI.1 C-PAST die.AI.3  
 Susan, I cried, she died

I conclude from these facts that Baker's condition on NP licensing applies in East Cree. It seems desirable therefore to retain Baker's condition on NP licensing. This entails that an ideal phrase structure for East Cree is indeed along the lines of (1) repeated in (25) below.

(25) = (1)



### 5.3. A hierarchy alignment constraint

The analysis I am proposing makes use of one of the same conditions developed by Aissen (1997) to explain the morphological aspect of obviation: 'direct align' given in (26), is a two place relation between hierarchies X, Y that requires that there be no two elements  $\alpha$ ,  $\beta$ , such that  $\alpha$  outranks  $\beta$  on X, but  $\beta$  outranks  $\alpha$  on Y.

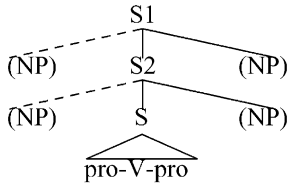
- (26) DIRECT ALIGN (X, Y) Iff  $\nexists \alpha, \beta / \alpha > \beta$  on X and  $\beta > \alpha$  on Y.  
 (Aissen, 1997: 711)

I propose that this condition applies to three hierarchies: the Person Hierarchy or more specifically here the obviation hierarchy, the phrase structure hierarchy and the linear order hierarchy. Let us start with the first two:

- X = The obviation hierarchy : PROXIMATE > OBVIATIVE  
 Y = The phrase structure hierarchy of the NP-as-adjunct analysis: S1 > S2 > S<sup>11</sup>

<sup>11</sup> An alternative to using two sentential adjunction levels would be to assume a Topic and a non-Topic node for S1 and S2 respectively, with still right and left branching options. However, the unmarked status of the proximate, especially when used with first and second persons, and the fact that some speakers carry the word order restrictions described here to sentences involving Speech Act Participants and third persons do not favour such an alternative. I leave this open to further research.

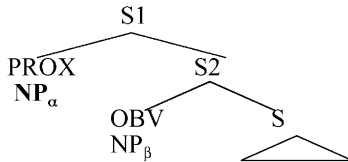




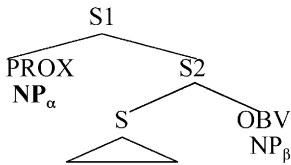
When we apply the direct align constraint to the obviation and the phrase structure hierarchies, we obtain, through (27), the annotated structures in (28):

- (27) Given  $\alpha$ , and  $\beta$ , indices in the obviation hierarchy (X) such that  $\alpha$  outranks  $\beta$  in (X); Given S1, S2 nodes in the structure (Y), such that S1 contains S2 and S2 contains S. Then, in structure (Y) align  $\alpha$ ,  $\beta$  with S1, S2 in such a way that  $NP_\alpha$  adjoins to S1 and  $NP_\beta$  adjoins to S2.

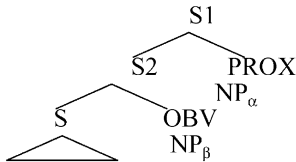
- (28) (A) PROX OBV V (33'V)



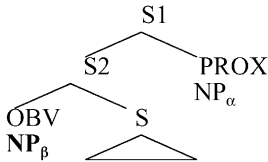
- (B) PROX V OBV (3V3')



- (C) V OBV PROX (V3'3)



- (D) OBV V PROX (3'V3)



- (E) No structure available for: \*OBV PROX V (3'3V)

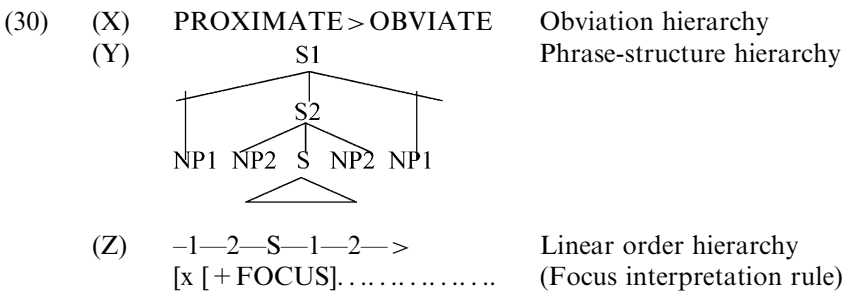
The structures above, predicted by the analysis, correctly account for the data, repeated on the right (A–E). The focussed NP is given in bold.

However, we still need to account for the non-preferred, but acceptable order V33' as well as the Focus/Kontrast interpretations of preverbal NPs positions [in bold in (28) above]. This is where the third hierarchy comes into play: the linear order of the sentence. This hierarchy represents the order of speech as a linear ordering of constituents from left to right order of the sentence (the order of speech). Focus interpretation is assigned to the leftmost NP of this latter hierarchy, by a mode given in (29). This last hierarchy (Z) is also subject to the same 'direct align' constraint with (X), the obviation hierarchy.

Z = Linear order hierarchy: 'order sentential constituents from left to right'

(29) Focus interpretation rule: 'Assign a Focus interpretation to the leftmost preverbal NP'.

(30) summarizes the three hierarchies at play in our analysis, all subject to the 'direct align' constraint:



The remaining data can now easily be accounted for: When (X) and (Z) are aligned together, but there is misalignment with (Y), we get a word order that is not preferred, but tolerated: V PROX OBV.

Violations of the 'direct align' constraint involving all three hierarchies are the most severe: When there is misalignment between both (X) and (Y), and (X) and (Z), we get a word order that is unacceptable: \*OBV PROX V. The focus interpretation of initial preverbal NPs follows from the linear order hierarchy and the focus interpretation rule.

### 6. Conclusions

Several conclusions can be drawn from this study. The most important one, and one that has gone unnoticed until now, is that Obviation determines word order, at least in East Cree. This observation in itself raises serious questions for linguists' traditional assumptions about what determines word order. While it was known up

to now that word order in non-configurational languages like East Cree is not determined by grammatical functions or thematic relations, it was only an hypothesis, made by Aissen (1997) that Obviation could have far reaching effects in syntax, like word order. No data had been found so far to test this hypothesis. The analysis developed here used a major insight from Aissen's work on the syntax of Obviation: The idea that hierarchy alignment constraints play a role in syntax. Specifically, I proposed that East Cree word order constraints result from an alignment constraint between three hierarchies: the person (obviation) hierarchy, the NP-as-adjunct phrase structure from Jelinek (1984) and Baker (1996), and the linear order of phrasal constituents. The new data presented here also provides evidence that the left periphery of the sentence plays a role in non-configurational languages like East Cree for information packaging instructions. The left-most preverbal NP position encodes Focus/Kontrast. I showed that an analysis that assumed that Focus is a functional projection failed to explain the East Cree data. Therefore another conclusion is that Focus, at least for non-configurational languages, might not be best accounted for by particular phrase structure features like functional projections. Rather Focus seems best treated as an interpretation rule that, in the Cree family of languages, selects the sentence initial NP position. This observation would benefit from more cross-linguistic investigation. Some missing pieces in a bigger puzzle can now be identified, as is often the case when one works with a language that has not yet been fully described: What are the differences between independent verbs (studied here) and conjunct verbs relative to word order constraints? Is the Focus/Kontrast interpretation a result of processing? Why is the obviation hierarchy, the one that encodes discourse (non)salience, so important in the grammar? How does such a hierarchy feed into the interface between syntax and semantics/pragmatics? With the rapid change and threat of disappearance such languages are under, these are questions we might never be able to answer.

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